

CLAIMS

1. An improved method of producing an ultra fast curing elastomeric article of the type comprising an elastomeric compound, the elastomeric compound comprising a fast cure package of co-reacting agents wherein the compound achieves ninety percent cure, at a cure temperature of 120° C, in less than 30 minutes, wherein the improvement comprises
 - a) preparing two non-productive elastomer compounds (10, 12), wherein each non-productive compound (10 or 12) is prepared with a co-reacting agent of a co-reacting cure package not added to the other non-productive compound (12 or 10),
 - b) layering the non-productive elastomer compounds (10, 12) in alternating layers with a thickness relative to the diffusion rate of the co-reacting agents in each non-productive elastomeric layer to effect diffusion of the co-reacting cure agents through the adjacent layers to form a layered compound and
 - c) curing the layered compound (22) to form the elastomeric article.
2. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by preparing the two non-productive compounds (10, 12) with identical compositions except for the co-reacting cure agents in each compound (10, 12).
3. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by forming each adjacent layer with a thickness equal or less than 2 mm.
4. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by layering the two non-productive elastomer compounds (10, 12) with differing thickness'.
5. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by the further step of forming the layered compound (22) with an absence of any accelerators found in the second non productive compound (12 or 10).
6. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by forming the first non productive compound (10 or 12) with an absence of any accelerators found in the second non productive compound (12 or 10).

10) and forming the second non-productive compound (12 or 10) with an absence of any sulfur vulcanizing agent found in the first non-productive compound (10 or 12).

- 5 7. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by forming the first non-productive compound (10 or 12) with 1 to 5 phr zinc oxide and 0 phr sulfur vulcanizing agent and forming the second non-productive compound (12 or 10) with 0 phr zinc oxide and 0.2 to 8 phr sulfur vulcanizing agent.
- 10 8. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by forming one non-productive elastomer compound (10 or 12) with a sulfur vulcanizing agent that is non-soluble when the two non-productive elastomer compounds (10 or 12) are layered and which converts to a diffusable state prior to curing of the layered compound (22).
- 15 9. A method of producing an ultra fast curing elastomeric article in accordance with claim 1, the method being characterized by applying the layered compound (22) on the surface of an article prior to curing the layered compound (22).